

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY
 (SUPPLEMENTARY SHEET)

International File No. PCT/DE2004/002221

Re Point V

1. The following documents are cited in the present notice:

D1: US 2002/132701 A1 (Mabuchi Mamoru et al.), September 19, 2002

D2: EP-A-1 277 940 (Robert Bosch GmbH), January 22, 2003

D3: EP-A-1 308 342 (Ford Global Technologies, Inc.), May 7, 2003

2 Clarity and support (Article 6 PCT)

2.1 Claims 1 and 5 correspond to two embodiments that are not compatible. In Claim 1 which corresponds to Figure 3, the output variable of the drive unit is not based on its setpoint (line 17: "*regardless of its setpoint*"), whereas in Claim 5, which corresponds to Figure 2, the setpoint of the output variable of the drive unit is modified. Claim 5 cannot depend on Claim 1. **[handwritten]** *The modification of the setpoint does not mean that the setpoint is also completely implemented (see page 2, line 23).*

2.2 The object of Claim 1 is defined with a negative feature (disclaimer) (line 17: "*regardless of its setpoint*"). A positive definition (as in Figure 3: replacing Msetpoint by MRES1) seems possible.

2.3 Use of the parameters "output variable" and "operating variable" in a claim does not seem to be supported by the description. The only options described are "torque

power" [added by hand: cylinder charge p. 3, line 19] and "speed" [added by hand: additional operating variables p. 4, 1. 17-18]. The examples presented here do not justify a broader scope of protection..

3. **Claims 1 and 5**

In addition to the preceding objections, the present patent application fails to meet the requirements of Article 33(1) PCT because the subject matter of Claims 1 and 5 is not novel as defined in Article 33(2) PCT.

3.1 **Claim 1**

Document D1 discloses:

A method for operating a drive unit (drive engine), in particular in a vehicle, wherein a setpoint for the at least one output variable (Figure 4 - Tit) of the drive unit is specified, wherein a setpoint for an operating variable of the drive unit (idling speed setpoint Target Ne) is specified in at least one operating state of the drive unit (idling operation), the at least one output variable of the drive unit being specified in this operating state regardless of its setpoint in the sense of approximating an actual value for the operating variable to the setpoint for the operating variable (switching block 56).

3.2 **Claim 5**

Document D2 discloses:

A method for operating a drive unit (drive engine), in particular in a vehicle, in which a setpoint for at least one output variable (torque setpoint MSETPOINTRES) of the drive unit is specified, wherein a setpoint for an operating variable of the drive unit (idling speed setpoint) is also specified in at least one operating state of the drive unit (idling operation and in the

transition from idling to non-idling operation), the setpoint of at least one output variable¹ of the drive unit being modified in the sense of approximating an actual value for the operating variable to the setpoint for the operating variable in this operating state (MSETPOINTRES is modified according to the output of the idling regulator).

An equivalent argument may be presented with document **D3** (paragraph [0072]).

4. Independent Claim 11

The above analysis also applies to independent Claim 11 (device) which corresponds to Claim 1. Claim 11 therefore does not meet the requirements of Article 33(2) PCT.

5. Dependent Claims 2 through 4 and 6 through 10 do not contain any features which, in combination with the features of any claim to which they refer, would meet the requirements of PCT with regard to novelty. The reasons for this are as follows:

- 5.1 Claims 2 and 3: A torque is selected as the output variable in documents D1 through D3 and a speed of an engine is selected as the operating variable.
- 5.2 Claim 4: In document D2 (paragraph [0026]) the torque is modified in the transition from idling operation to non-idling operation (i.e., in start-up operation) and in document D3 (paragraph [0072]) the torque is modified during the start-up operation.
- 5.3 Claims 6, 7 and 8: In documents D1 through D3, the torque setpoint of an internal combustion engine is specified in the sense of a speed regulator. In all documents the

¹ TN: My best guess here is "der Sollwert mindestens einer Ausgangsgröße"

firing angle, the fuel injection, and the air supply are used as control variables to monitor the torque.

5.4 Claim 9: See document D2 (paragraph [0026]): the torque is modified in the transition from idling operation to non-idling operation.

5.5 Claim 10: In documents D2 and D3, the torque setpoint is transformed without modification after the end of the operating state with modification.